WHAT IS CLAIMED IS:

1. A method for recording data on an optical disk while using a running optimum power control (OPC), comprising the steps of:

recording data on the optical disk by using an optical spot having a recording optical power and a reproducing optical power, said recording optical power and said reproducing optical power alternately occurring for generating a mark and a space, respectively, on the optical disk;

detecting the optical spot reflected from the mark on the optical disk as a reflected optical spot during generating the mark;

measuring a front power level representing an optical power of a front side of said reflected optical spot, and a rear power level representing an optical power of a rear side of said reflected optical spot; and

controlling said recording optical power of said optical spot based on said front power level and said rear power level.

2. The method according to claim 1, wherein said controlling step includes calculation of a detected index of a recorded state of the mark.

3. The method according to claim 2, wherein said detected index is calculated from said front power level (Spab) and said rear power level (Spcd).

4. The method according to claim 1, wherein said controlling step controls said recording optical power based additionally on said recording

optical power.

5. The method according to claim 1, wherein said controlling step controls said recording optical power based additionally on said recording optical power and a linear velocity of the optical disk.

6. The method according to claim 5, wherein said controlling step includes calculation of a correcting factor used as an inherent value for a specified recording condition based on said linear velocity.

7. The method according to claim 2, wherein said detected index is calculated from said front power level (Spab), said rear power level (Spcd) and said recording optical power level (Pr).

8. The method according to claim 2, wherein said detected index is calculated from said front power level, said rear power level, said recording optical power level and a linear velocity of the optical disk.

9. The method according to claim 8, wherein said detected index is calculated from said front power level (Spab), said rear power level (Spcd), said recording optical power (Pr) and a correction factor (k) which is calculated from said linear velocity as an inherent value for a specified recording condition.

10. The method according to claim 3, wherein said detected index is

obtained as a ratio Spab/Spcd or Spcd/Spab.

11. The method according to claim 7, wherein said detected index is obtained as a ratio between Spab/Spcd or Spcd/Spab and Pr^n, given n being a sensitive factor of said running OPC.

12. The method according to any one of claims 11, wherein said sensitive factor of said running OPC is adjusted as an optimum value for each type of optical disks for adjusting a degree of control in said running OPC.

13. The method according to claim 9, wherein said detected index is obtained as a ratio between Spab/Spcd or Spcd/Spab and a value calculated from said correction factor and Pr^n, given n being a sensitive factor of said running OPC

14. The method according to claim 13, wherein a sensitive factor of said running OPC for calculating said detected index is adjusted as an optimum value for each type of optical disks for adjusting a degree of control in said running OPC.

15. The method according to claim 2, wherein said detected index detected in said running OPC is used as a target value for said index of recorded state during a calibration OPC on a power calibration area of the optical disk.

16. The method according to claim 2, wherein said detected index detected in said running OPC is used as a target value for said index of recorded state by using a calibration running OPC for calibrating an optimum recording optical power before starting actual recording on a recording area of the optical disk.

17. The method according to claim 2, wherein said detected index detected in said running OPC is used as a target value for said index of recorded state after starting actual recording on a recording area of the optical disk by using a calibration running OPC for calibrating an optimum recording optical power.

18. The method according to any one of claims 15 to 17, wherein said calibration running OPC is performed so as to obtain a minimum value for a difference between said target value and a detected index detected in said calibration running OPC.

19. The method according to claim 18, wherein said calibration running OPC is performed for at least one revolution of the optical disk, and said detected index is obtained as an average of indexes measured for said at least one revolution of said calibration running OPC.

20. The method according to claim 19, wherein a parameter for calculating said average of indexes is obtained by another running OPC

conducted for at least one revolution of the optical disk by an average of parameters measured for said at least one revolution.

21. An optical disk drive for driving an optical disk by using a running optical power control (OPC), comprising:

an optical system for irradiating an optical disk with an optical spot having a recording optical power and a reproducing optical power, said recording optical power and said reproducing optical power alternately occurring for generating a mark and a space, respectively, on a track of the optical disk;

a photodetector for receiving the optical spot reflected from the optical disk as a reflected optical spot, said photodetector having a plurality of sensor areas divided at least in a tangential direction of the track; and

an OPC block for receiving outputs of said photodetector to detect a front power level and a rear power level of the reflected optical spot, wherein said OPC block detects a recorded state of the mark by calculating an index of the recorded state based on said front power level and said rear power level, and controls said recording optical power based on the index of the recorded state during said running OPC.

22. The disk drive according to claim 21, wherein said OPC block controls said recording optical power based on either said front power level, said rear power level and said recording optical power, or said front power level, said rear power level, said recording optical power and a linear velocity of the optical disk, or said front power level, said rear power level,

said recording optical power and a correction factor calculated from a linear velocity of the optical disk as an inherent value for a specified recording condition.

23. The disk drive according to claim 21, wherein said index of the recorded state is calculated from either said front power level (Spab), said rear power level (Spcd) and said recording optical power Pr), or said front power level (Spab), said rear power level (Spcd), said recording optical power (Pr) and a linear velocity of the optical disk, or said front power level (Spab), said rear power level (Spcd), said recording optical power (Pr) and a correction factor (k) calculated from a linear velocity of the optical disk as an inherent value for a specified recording condition.

24. The disk drive according to claim 23, wherein said index of the recorded state is obtained as either a ratio Spab/Spcd or Spcd/Spab, a ratio between Spab/Spcd or Spcd/Spab and Pr^n, given n being a sensitive factor of said running OPC, or ratio between Spab/Spcd or Spcd/Spab and $Pr^n \times k$, given k being a correction factor obtained from said linear velocity as an inherent value under a specified condition.

25. The disk drive according to any one of claims 24, wherein a sensitive factor of said running OPC is adjusted as an optimum value for each type of optical disks for adjusting a degree of control in said running OPC.

26. The method according to claim 21, wherein said OPC block uses said detected index as a target value for said index of recorded state during a calibration OPC on a power calibration area of the optical disk.

27. The method according to claim 21, wherein sid OPC block uses said detected index as a target value for said index of recorded state by using a calibration running OPC for calibrating an optimum recording optical power before starting actual recording on a recording area of the optical disk.

28. The method according to claim 21, wherein said OPC block uses said detected index as a target value for said index of recorded state after starting actual recording on a recording area of the optical disk by using a calibration running OPC for calibrating an optimum recording optical power.

29. The method according to any one of claims 26 to 28, wherein said OPC block controls said recording optical power so as to obtain a minimum value for a difference between said target value and a detected index detected in said calibration running OPC.

30. The method according to claim 29, wherein said OPC block performs said calibration running OPC for at least one revolution of the optical disk, and obtains said detected index as an average of indexes measured for said at least one revolution of said calibration running OPC.

31. The method according to claim 30, wherein said OPC block obtains a parameter for calculating said average of indexes by conducting another running OPC for at least one revolution of the optical disk by an average of parameters measured for said at least one revolution.